

unpatentable over Jones et al in view of Shiobara et al and further in view of Benton. These rejections are traversed as follows.

According to the present invention, communication through the first path corresponds to communication between a personal computer (8), for example, and a host apparatus (10), such as a server. Communication through the second path, on the other hand, corresponds to communication of electronic money information or data between the data processor (5 and the IC card 1) and the host apparatus (10). The establishment of two paths by the switching circuit in the terminal device of the present invention enables communication of electronic money data separately from the general communication between an external information processor, such as a personal computer, and a host apparatus. This enables security of the communication of the electronic money data and ensures that such communication can be conducted even in the event of the failure of the external information processor (personal computer). Further, since both of the first and second paths establish output to the communication circuit, such as a modem, any external information processor can be used to communicate with the host apparatus through the terminal device, even if the external information processor does not have its own modem.

On the other hand, Jones et al disclose a value transfer system in which terminals 5 that have card readers 9 are connected by telephones to bank computers 1, 2 and 3. The terminals 5 may be home computers, and each of the bank computers has a bulk purse 1c, 2c and 3c, as shown in Fig. 1 of the reference. Accordingly, communication, including electronic money data transaction communications, are executed through a terminal 5, unlike the presently claimed invention. Furthermore, in the event of a power failure or other interruption of the first external device, electronic money data transactions cannot take place. In addition, Jones et al do not disclose any terminal unit that has its own communication device which enables any external device to communicate with a host.

Contrary to the Examiner's assertions, neither Shiobara et al nor Benton overcome the deficiencies in Jones et al. These references fail to disclose a terminal device with a first path, a second path, and a switching circuit as recited in the pending claims. Shiobara et al disclose a host device (parent terminal) and a plurality of terminal devices (daughter terminals) that are combined in a tree structure in which the host device is a root. Electronic money can be mutually exchanged between the host device and the terminal devices. This is clearly different than the terminal device

of the present invention having the first path, second path, and switch as recited.

The claims have been amended to more clearly define how the first and second paths enable a secured electronic money data transaction. It is submitted that no combination of the cited references renders the pending claims unpatentable.

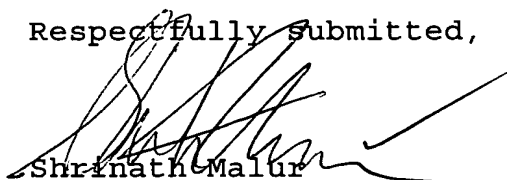
REQUEST FOR INTERVIEW

Applicants request that the Examiner conduct an interview with the undersigned prior to the issuance of a first Office Action in order to expedite prosecution of the application. The Examiner is hereby invited to contact the undersigned by telephone to arrange an appropriate time for the interview.

CONCLUSION

Examination is respectfully requested.

Respectfully Submitted,


Shrinath Malur
Registration No. 34,663
Attorney for Applicants

MATTINGLY, STANGER & MALUR
1800 Diagonal Rd., Suite 370
Alexandria, Virginia 22314
(703) 684-1120
Date: July 17, 2002

MARKED UP VERSION OF REWRITTEN CLAIMS

23. (Amended) A terminal device used in an electronic money system, comprising:

a data processor which processes data in an IC card storing electronic money information;

a communication circuit which communicates with a second external device through a public line;

a switching circuit which switches between a first path and a second path, said first path outputting data input from a first external device to said communication circuit, and said second path outputting electronic money data from said data processor to said communication circuit; and

a control circuit which controls said data processor, said communication circuit, and said switching circuit;

wherein, said control circuit controls said switching circuit to switch from said first path to said second path at a time of transaction of electronic money information, and

wherein said control circuit controls said switching circuit to switch from the first path to the second path, said first external device is prevented from outputting data to said communication circuit.

36. (Amended) A terminal device used in an electronic money system, comprising:

a first terminal device including an input device which enters data from a first external device, a communication circuit which communicates with a second external device through a public line, and a light receiving device which receives light signals;

a second terminal device including, a data processor which processes data in an IC card storing electronic money information, a light emitting device which generates light signals for sending to said first terminal device, and a control circuit which controls said data processor and said communication circuit; and

a switching circuit in said first terminal device, which switches between a first path and a second path, said first path outputting data input from said first external device to said communication circuit, and said second path outputting electronic money data from said data processor of said second terminal input through said light receiving device to said communication circuit;

wherein said control circuit in said second terminal device controls said switching circuit to switch from said first path to said second path at a time of transaction of electronic money, and

wherein said control circuit in said second terminal device controls said switching circuit to switch from the first path to the second path, said first external device is prevented from outputting data to said communication circuit.

37. (Amended) A first terminal device used in an electronic money system having a second terminal device including, a data processor which processes data in an IC card storing electronic money information, a light emitting device which generates light signals for sending to said first terminal device, and a control circuit which controls said data processor, said first terminal device comprising:

an input device which enters data from a first external device;

a communication circuit which communicates with a second external device through a public line;

a light receiving device which receives light signals;

a switching circuit, which switches between a first path and a second path, said first path outputting data input from a first external device to said communication circuit, and said second path outputting electronic money data from said data processor of said second terminal device input

through said light receiving device to said communication circuit;

wherein said switching circuit switches from said first path to said second path at a time of transaction of electronic money according to a control signal from said control circuit in said second terminal device, and

wherein when said switching circuit switches from said first path to said second path, said first external device is prevented from outputting data to said communication circuit.